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NEWS 2		"Ask CAS" for self-help around the clock
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NEWS 4	Jul 15	Data from 1960-1976 added to RDISCLOSURE
NEWS 5	Jul 21	Identification of STN records implemented
NEWS 6	Jul 21	Polymer class term count added to REGISTRY
NEWS 7	Jul 22	INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available
NEWS 8	AUG 05	New pricing for EUROPATFULL and PCTFULL effective August 1, 2003
NEWS 9	AUG 13	Field Availability (/FA) field enhanced in BEILSTEIN
NEWS 10	AUG 15	PATDPAFULL: one FREE connect hour, per account, in September 2003
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NEWS 12	AUG 15	RDISCLOSURE: one FREE connect hour, per account, in September 2003
NEWS 13	AUG 15	TEMA: one FREE connect hour, per account, in September 2003
NEWS 14	AUG 18	Data available for download as a PDF in RDISCLOSURE
NEWS 15	AUG 18	Simultaneous left and right truncation added to PASCAL
NEWS 16	AUG 18	FROSTI and KOSMET enhanced with Simultaneous Left and Right Truncation
NEWS 17	AUG 18	Simultaneous left and right truncation added to ANABSTR
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NEWS 19	SEP 25	INPADOC: Legal Status data to be reloaded
NEWS 20	SEP 29	DISSABS now available on STN
NEWS EXPRESS	OCTOBER 01	CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003
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NEWS INTER		General Internet Information
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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 14:03:18 ON 06 OCT 2003

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 14:03:28 ON 06 OCT 2003

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STRUCTURE FILE UPDATES: 3 OCT 2003 HIGHEST RN 598296-84-5

DICTIONARY FILE UPDATES: 3 OCT 2003 HIGHEST RN 598296-84-5

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

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Experimental and calculated property data are now available. See HELP  
PROPERTIES for more information. See STNote 27, Searching Properties  
in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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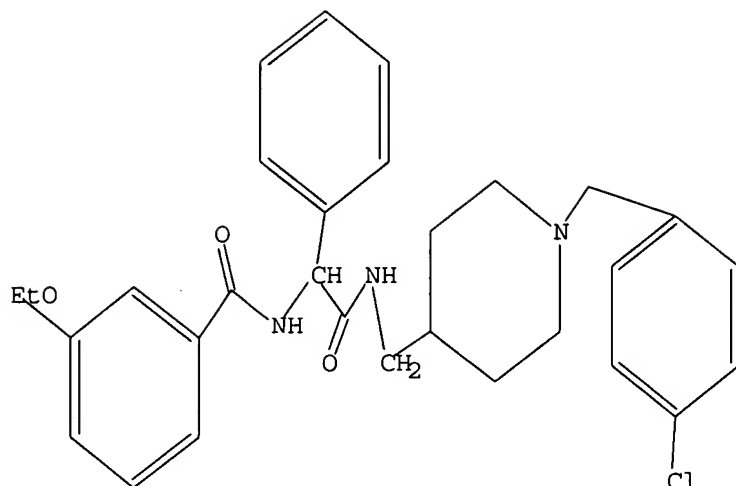
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L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss full

FULL SEARCH INITIATED 14:03:58 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 365 TO ITERATE

100.0% PROCESSED 365 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

L2 1 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

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ENTRY	SESSION
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FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 14:04:05 ON 06 OCT 2003

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FILE COVERS 1907 - 6 Oct 2003 VOL 139 ISS 15

FILE LAST UPDATED: 5 Oct 2003 (20031005/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L3 3 L2

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L3 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN  
 AN 2002:237356 CAPLUS  
 DN 136:263090  
 TI Preparation of cyclic amine derivatives for inhibition of the action of chemokines such as MIP-1.alpha. and/or MCP-1 on target cells  
 IN Shiota, Tatsuki; Kataoka, Ken-Ichiro; Imai, Minoru; Tsutsumi, Takaharu; Sudoh, Masaki; Sogawa, Ryo; Morita, Takuya; Hada, Takahiko; Muroga, Yumiko; Takenouchi, Osami; Furuya, Minoru; Endo, Noriaki; Tarby, Christine M.; Moree, Wilna; Teig, Steven  
 PA Teijin Limited, Japan; Dupont Pharmaceuticals Research Laboratories  
 SO U.S., 364 pp., Cont. of U.S. Ser. No. 554,562.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6362177	B1	20020326	US 2001-905078	20010716
				US 2000-554562 A320000516	
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				US 1998-55285 B119980406	
				US 1998-133434 B119980813	
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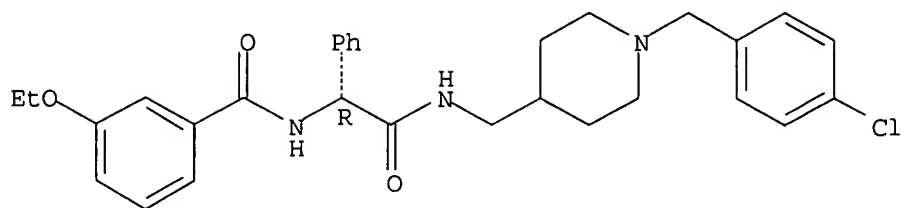
## PATENT FAMILY INFORMATION:

FAN 1999:350650

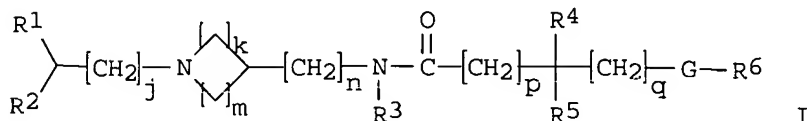
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AU	9913741	A1	19990607	AU 1999-13741	19981117
AU	744685	B2	20020228		
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EP 1030840	A1	20000830	EP 1998-957495 19981117
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			US 1998-55285 A 19980406
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			US 1998-55285 A 19980406
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			US 1998-55285 A 19980406
			US 1998-133434 A 19980813
			WO 1998-US23254W 19981117
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			WO 1998-US23254W 19981117
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			US 1998-55285 A 19980406
			US 1998-133434 A 19980813
			WO 1998-US23254W 19981117
BG 104441	A	20010131	BG 2000-104441 20000516
			US 1997-972484 A 19971118
			US 1998-55285 A 19980406
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			WO 1998-US23254W 19981117
US 6451842	B1	20020917	US 2000-554562 20000516
			US 1997-972484 B1 19971118
			US 1998-55285 B1 19980406
			US 1998-133434 B1 19980813
			WO 1998-US23254W 19981117
OS	MARPAT 136:263090		
IT	<b>226248-06-2P</b> , Benzeneacetamide, N-[[1-[(4-chlorophenyl)methyl]-4-piperidinyl)methyl]-.alpha.-[(3-ethoxybenzoyl)amino]-, (.alpha.R)-		
	RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)		
	(prepn. of cyclic amine derivs. for inhibition of action of chemokines such as MIP-1.alpha. and/or MCP-1 on target cells)		
RN	226248-06-2 CAPLUS		
CN	Benzeneacetamide, N-[[1-[(4-chlorophenyl)methyl]-4-piperidinyl)methyl]-.alpha.-[(3-ethoxybenzoyl)amino]-, (.alpha.R)- (9CI) (CA INDEX NAME)		

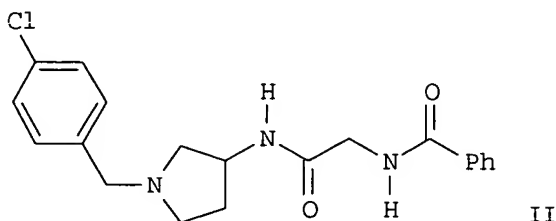
Absolute stereochemistry.



GI



I



II

AB The title compds. [I; R1 = (un)substituted Ph, cycloalkyl, heteroaryl, etc.; R2 = H, alkyl, alkoxy carbonyl, etc.; j = 0-2; k = 0-2; m = 3-4 and k+m = 5 or 6; n = 0-1; R3 = H, alkyl; R4, R5 = H, OH, Ph, etc.; p, q = 0-1; G = CO, SO, CO2, etc.; R6 = Ph, cycloalkyl, cycloalkenyl, etc.] and their pharmaceutically acceptable acid addn. salts which inhibit the action of chemokines such as MIP-1.alpha. and/or MCP-1 on target cells and may be useful as a therapeutic drug and/or preventative drug in diseases, such as atherosclerosis, rheumatoid arthritis, and the like where blood monocytes and lymphocytes infiltrate into tissues, were prepd. Thus, reaction of N-benzoylglycine with 3-amino-1-(4-chlorobenzyl)pyrrolidine.2HCl in the presence of 3-ethyl-1-[3-(dimethylaminopropyl)]carbodiimide.HCl, 1-hydroxybenzotriazole and Et3N in CHCl3 afforded 95% II which showed 50-80% inhibition of MIP-1.alpha. binding to THP-1 cells at 10 .mu.M.

RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2000:824101 CAPLUS

DN 134:5154

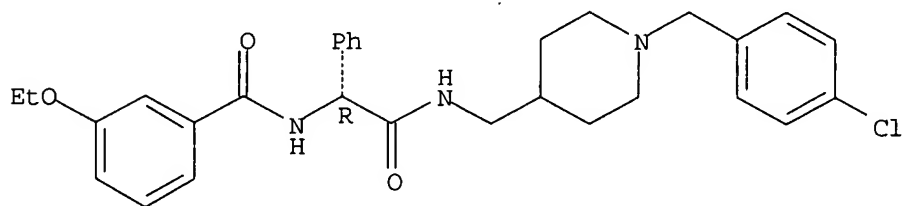
TI Preparation of cyclic amine derivatives as remedies or preventives for diseases in association with chemokines or chemokine receptors

IN Shiota, Tatsuki; Miyagi, Fuminori; Kamimura, Takashi; Ohta, Tomohiro; Takano, Yasuhiro; Horiuchi, Hideki

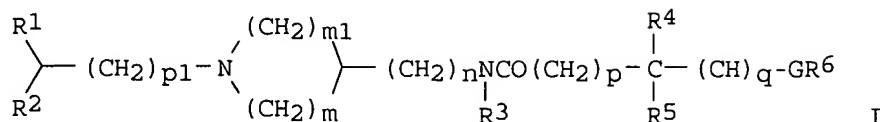
PA Teijin Limited, Japan  
 SO PCT Int. Appl., 405 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000069432	A1	20001123	WO 2000-JP3203	20000518
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				JP 1999-175856 A	19990518
				JP 1999-251464 A	19990906
	EP 1179341	A1	20020213	EP 2000-927808	20000518
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				JP 1999-251464 A	19990906
				WO 2000-JP3203 W	20000518
	NO 2001005599	A	20011116	NO 2001-5599	20011116
				JP 1999-175856 A	19990518
				JP 1999-251464 A	19990906
				WO 2000-JP3203 W	20000518
OS	MARPAT 134:5154				
IT	<b>226248-06-2P</b>				
	RL:	BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)			
		(prepn. of cyclic amine derivs. as remedies or preventives for diseases in assocn. with chemokines or chemokine receptors)			
RN	226248-06-2	CAPLUS			
CN	Benzeneacetamide, N-[[1-[(4-chlorophenyl)methyl]-4-piperidinyl]methyl]-.alpha.-[(3-ethoxybenzoyl)amino]-, (.alpha.R)- (9CI) (CA INDEX NAME)				

Absolute stereochemistry.



GI



AB Remedies or preventives for diseases in assocn. with chemokines such as MIP-1.alpha. and/or MCP-1 or chemokine receptors such as CCR1 or CCR2 contain as the active ingredient N-acyl-amino acid N-cyclic amino or N-cyclic aminoalkyl-amide derivs. represented by general formula [I; (un)substituted Ph, C3-8 cycloalkyl, arom. heterocyclyl contg. 1-3 heteroatoms selected from O, S, and/or N; R2 = H, (un)substituted C1-6 alkyl, C2-7 alkoxy-carbonyl, HO, (un)substituted Ph; p1, m1 = 0-2; m = 2-4; n = 0,1; R3 = H, (un)substituted C1-6 alkyl; R4, R5 = H, OH, (un)substituted Ph or C1-6 alkyl; or R4 and R5 are combined together to form a 3- to 5-membered hydrocarbonyl; p, q = 0,1; G = CO, SO2, CO2, NR7CO, CONR7, NR7SO2, or SO2NR7, NHCONH, NHCSNH, NH CO2, O2CNH; R7 = H, C1-6 alkyl; or R7 and R5 are combined together to form C2-5 alkylene; R6 = (un)substituted Ph, C3-8 cycloalkyl, C3-6 cycloalkenyl, CH2Ph, or arom. heterocyclyl contg. 1-3 heteroatoms selected from O, S, and/or N, wherein Ph, CH2Ph, or arom. heterocyclyl group is optionally fused with (un)substituted benzene or arom. heterocyclyl contg. 1-3 heteroatoms selected from O, S, and/or N], pharmaceutically acceptable acid-adducts thereof, or pharmaceutically acceptable C1-6 alkyl-adducts thereof. The above diseases include destruction of bone or cartilage (e.g. arthritis, rheumatoid arthritis, osteoarthritis, osteoporosis, injury, and tumor), nephritis, kidney diseases, glomerulus or interstitial nephritis, nephrotic syndrome, demyelinating disease, or multiple sclerosis. Thus, N-3-ethoxybenzyl-D-methionine-N-[1-(4-chlorobenzyl)-4-piperazinylmethyl]amide in vitro inhibited the binding of human MIP-1.alpha. to THP-1 cells by >80% at 2 .mu.M.

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1999:350650 CAPLUS

DN 131:18925

TI Preparation of cyclic amine derivatives for inhibition of the action of chemokines such as MIP-1.alpha. and/or MCP-1 on target cells

IN Shiota, Tatsuki; Kataoka, Kenichiro; Imai, Minoru; Tsutsumi, Takaharu; Sudoh, Masaki; Sogawa, Ryo; Morita, Takuya; Hada, Takahiko; Muroga, Yumiko; Takenouchi, Osami; Furuya, Monoru; Endo, Noriaki; Tarby, Christine M.; Moree, Wil A.; Teig, Steven L.

PA Teijin Ltd., Japan; Combichem, Inc.

SO PCT Int. Appl., 374 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9925686	A1	19990527	WO 1998-US23254	19981117
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			RU, TJ, TM
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AU 9913741	A1	19990607	AU 1999-13741 19981117
AU 744685	B2	20020228	
			US 1997-972484 A 19971118
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US 1998-133434 B119980813  
 WO 1998-US23254W 19981117

## PATENT FAMILY INFORMATION:

FAN 2002:237356

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6362177	B1	20020326	US 2001-905078	20010716
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OS MARPAT 131:18925

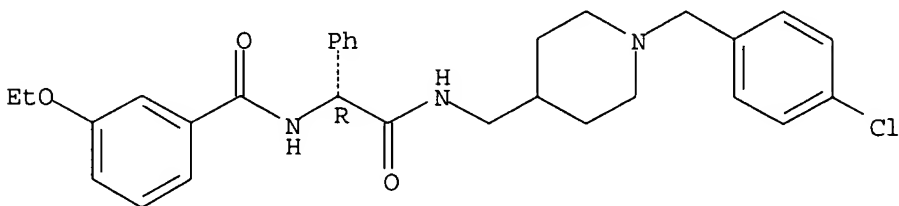
IT 226248-06-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of cyclic amine derivs. for inhibition of the action of chemokines such as MIP-1.alpha. and/or MCP-1 on target cells)

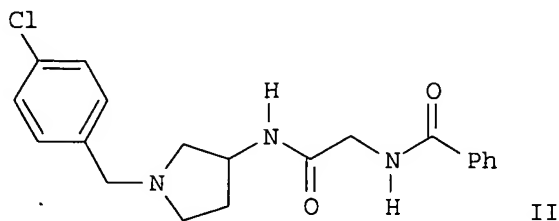
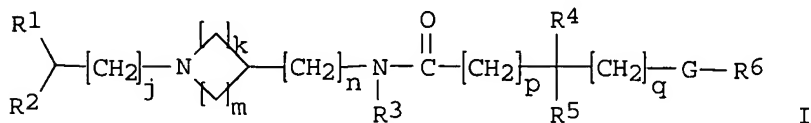
RN 226248-06-2 CAPLUS

CN Benzeneacetamide, N-[[1-[(4-chlorophenyl)methyl]-4-piperidiny]methyl]-.alpha.-[(3-ethoxybenzoyl)amino]-, (.alpha.R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

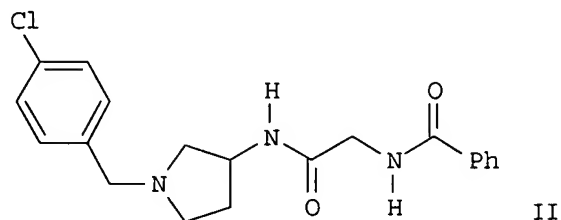
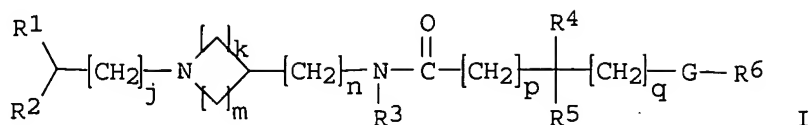


GI



Patel

&lt;10/6/2003&gt;



AB The title compds. [I; R1 = (un)substituted Ph, cycloalkyl, heteroaryl, etc.; R2 = H, alkyl, alkoxy carbonyl, etc.; j = 0-2; k = 0-2; m = 2-4; n = 0-1; R3 = H, alkyl; R4, R5 = H, OH< Ph, etc.; p = 0-1; q = 0-1; G = CO, SO, CO2, etc.; R6 = Ph, cycloalkyl, cycloalkenyl, etc.] and their pharmaceutically acceptable acid addn. salts which inhibit the action of chemokines such as MIP-1.alpha. and/or MCP-1 on target cells and may be useful as a therapeutic drug and/or preventative drug in diseases, such as atherosclerosis, rheumatoid arthritis, and the like where blood monocytes and lymphocytes infiltrate into tissues, were prepd. Thus, reaction of N-benzoylglycine with 3-amino-1-(4-chlorobenzyl)pyrrolidine.2HCl in the presence of 3-ethyl-1-[3-(dimethylaminopropyl)]carbodiimide.HCl, 1-hydroxybenzotriazole and Et3N in CHCl3 afforded 95% II which showed 50-80% inhibition of MIP-1.alpha. binding to THP-1 cells at 10 .mu.M.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s l3 and serine protease

L4 0 L3 AND SERINE PROTEASE

=> s serine protease and receptors

L5 750 SERINE PROTEASE AND RECEPTORS

=> s l5 and phenyl glycine

L6 0 L5 AND PHENYL GLYCINE

=> s l5 and piperidine

L7 0 L5 AND PIPERIDINE

=> s l5 and indole

L8 1 L5 AND INDOLE

=> d l8 fbib hitstr abs total

L8 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1999:375527 CAPLUS

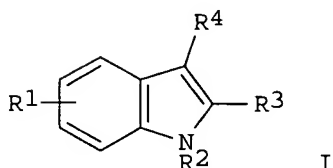
DN 131:31874

TI Preparation of amidinophenylpropionylindoles and related compounds as thrombin inhibitors.

IN Heckel, Armin; Walter, Rainer; Soyka, Rainer; Stassen, Jean-Marie; Wienen, Wolfgang; Binder, Klaus  
 PA Boehringer Ingelheim Pharma KG, Germany  
 SO PCT Int. Appl., 173 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA German  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	AU 9922671	A1	19990616	DE 1997-19753522	19971203
				AU 1999-22671	19981127
				DE 1997-19753522	19971203
				WO 1998-EP7661	19981127

OS MARPAT 131:31874  
 GI



AB Title compds. [I; R1 = F, Cl, Br, CO2H, aminocarbonyl, aminosulfonyl, amino, group convertible to CO2H in vivo; 1 of R2, R4 = (CO2H- or group convertible to CO2H in vivo-substituted) alkyl, the other = R5A; A = (CO2H- or group convertible to CO2H in vivo-substituted) alkylene, etc.; R5 = R6NHC(:NH)-substituted Ph; R4 = H, alkyl; R6 = H, in vivo-cleavable group], were prepd. as antithrombotics with inhibitory activity against **serine proteases XII** and **fibrinogen receptors**. Thus, 3-[3-(4-amidinophenyl)propionyl]-1-methylindole-5-carboxylic acid N-(2-carboxyethyl)-N-phenylamide hydrochloride (prepn. given) showed a thrombin time ED200 = 0.80 .mu.M.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s l5 indole and piperidine

MISSING OPERATOR L5 INDOLE

The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> s l5 and indole and piperidine

L9 0 L5 AND INDOLE AND PIPERIDINE

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

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198.74

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-2.60

-2.60

STN INTERNATIONAL LOGOFF AT 14:09:10 ON 06 OCT 2003

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PASSWORD:

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NEWS	3	SEP 09	CA/CAPLUS records now contain indexing from 1907 to the present
NEWS	4	Jul 15	Data from 1960-1976 added to RDISCLOSURE
NEWS	5	Jul 21	Identification of STN records implemented
NEWS	6	Jul 21	Polymer class term count added to REGISTRY
NEWS	7	Jul 22	INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available
NEWS	8	AUG 05	New pricing for EUROPATFULL and PCTFULL effective August 1, 2003
NEWS	9	AUG 13	Field Availability (/FA) field enhanced in BEILSTEIN
NEWS	10	AUG 15	PATDPAFULL: one FREE connect hour, per account, in September 2003
NEWS	11	AUG 15	PCTGEN: one FREE connect hour, per account, in September 2003
NEWS	12	AUG 15	RDISCLOSURE: one FREE connect hour, per account, in September 2003
NEWS	13	AUG 15	TEMA: one FREE connect hour, per account, in September 2003
NEWS	14	AUG 18	Data available for download as a PDF in RDISCLOSURE
NEWS	15	AUG 18	Simultaneous left and right truncation added to PASCAL
NEWS	16	AUG 18	FROSTI and KOSMET enhanced with Simultaneous Left and Right Truncation
NEWS	17	AUG 18	Simultaneous left and right truncation added to ANABSTR
NEWS	18	SEP 22	DIPPR file reloaded
NEWS	19	SEP 25	INPADOC: Legal Status data to be reloaded
NEWS	20	SEP 29	DISSABS now available on STN
NEWS EXPRESS			OCTOBER 01 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003
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NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
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FILE 'HOME' ENTERED AT 14:13:27 ON 06 OCT 2003

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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 3 OCT 2003 HIGHEST RN 598296-84-5

DICTIONARY FILE UPDATES: 3 OCT 2003 HIGHEST RN 598296-84-5

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PROPERTIES for more information. See STNote 27, Searching Properties  
in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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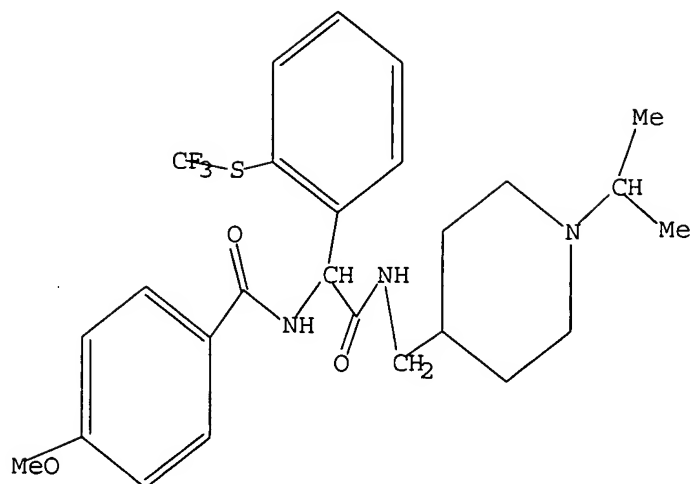
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L1 STRUCTURE UPLOADED

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L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss full

FULL SEARCH INITIATED 14:14:01 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 24 TO ITERATE

100.0% PROCESSED 24 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

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=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

148.15

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FILE COVERS 1907 - 6 Oct 2003 VOL 139 ISS 15

FILE LAST UPDATED: 5 Oct 2003 (20031005/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.



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L3 1 L2

=&gt; d 13 fbib hitstr abs total

L3 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN  
 AN 2001:923765 CAPLUS  
 DN 136:37947  
 TI Preparation of amino acid derivatives as serine protease inhibitors  
 IN Liebeschuetz, John Walter; Murray, Christopher William; Young, Stephen  
 Clinton; Camp, Nicholas Paul; Jones, Stuart Donald; Wylie, William  
 Alexander; Masters, John Joseph; Wiley, Michael Robert; Sheehan, Scott  
 Martin; Engel, David Birenbaum; Watson, Brian Morgan  
 PA Eli Lilly and Company, USA  
 SO PCT Int. Appl., 188 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 13

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001096303	A1	20011220	WO 2001-GB2551	20010612
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				WO 2000-GB2302 W	20000613
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	WO 2000076971	A2	20001221	WO 2000-GB2302	20000613
	WO 2000076971	A3	20010802		
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				GB 1999-13823 A	19990614
				US 1999-142064PP	19990702
				GB 1999-18741 A	19990809
				GB 1999-29553 A	19991214
	EP 1289954	A1	20030312	EP 2001-940716	20010612
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				WO 2000-GB2302 A	20000613
				GB 2000-30305 A	20001213
				WO 2001-GB2551 W	20010612
	US 2003109706	A1	20030612	US 2002-30188	20020204
				WO 2000-GB2302 A	20000613

GB 2000-30305 A 20001213  
 WO 2001-GB2551 W 20010612

## PATENT FAMILY INFORMATION:

FAN 1999:184268

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9911657	A1	19990311	WO 1998-GB2600	19980828
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			GB 1997-18392	A 19970829
			GB 1998-3173	A 19980213
AU 9888753	A1	19990322	AU 1998-88753	19980828
			GB 1997-18392	A 19970829
			GB 1998-3173	A 19980213
			WO 1998-GB2600	W 19980828
EP 1012166	A1	20000628	EP 1998-940425	19980828
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			GB 1998-3173	A 19980213
			WO 1998-GB2600	W 19980828
US 6262069	B1	20010717	US 2000-485677	20000225
			GB 1997-18392	A 19970829
			GB 1998-3173	A 19980213
			WO 1998-GB2600	W 19980828
US 2002040144	A1	20020404	US 2001-865418	20010529
			GB 1997-18392	A 19970829
			GB 1998-3173	A 19980213
			WO 1998-GB2600	W 19980828
			US 2000-485677	A120000225
US 6420438	B1	20020716	US 2000-865418	20010529
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			US 2000-485677	A120000225

FAN 1999:184269

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9911658	A1	19990311	WO 1998-GB2605	19980828
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AU 9888757	A1	19990322	AU 1998-88757	19980828
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			GB 1998-3173	A 19980213
			WO 1998-GB2605	W 19980828
EP 1009758	A1	20000621	EP 1998-940430	19980828
R: DE, FR, GB, IT				

US 2002055522 A1 20020509

GB 1997-18392 A 19970829  
 GB 1998-3173 A 19980213  
 WO 1998-GB2605 W 19980828  
 US 2001-988082 20011119  
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 GB 1998-3173 A 19980213  
 WO 1998-GB2605 W 19980828  
 GB 1999-13823 A 19990614  
 US 1999-142064PP 19990702  
 US 2000-485678 A220000225  
 WO 2000-GB2291 A220000613

FAN 2000:900613

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

PI

WO 2000076970

A2

20001221

WO 2000-GB2296

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WO 2000076970

A3

20010719

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GB 1999-13823 A 19990614

US 1999-142064PP 19990702

GB 1999-18741 A 19990809

GB 1999-29552 A 19991214

GB 1999-29553 A 19991214

EP 1192135

A2

20020403

EP 2000-938912 20000613

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GB 1999-13823 A 19990614

US 1999-142064PP 19990702

GB 1999-18741 A 19990809

GB 1999-29552 A 19991214

GB 1999-29553 A 19991214

WO 2000-GB2296 W 20000613

FAN 2000:900614

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

PI

WO 2000076971

A2

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WO 2000-GB2302

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WO 2000076971

A3

20010802

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GB 1999-13823 A 19990614

US 1999-142064PP 19990702

GB 1999-18741 A 19990809

GB 1999-29553 A 19991214

AU 2000054140

A5

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AU 2000-54140

20000613

EP 1192132 A2 20020403  
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JP 2003502314 T2 20030121

WO 2001096296 A1 20011220  
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WO 2001096323 A1 20011220  
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 WO 2000-GB2302 W 20000613  
 GB 2000-30304 A 20001213

WO 2001096304 A1 20011220  
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GB 1999-13823 A 19990614  
 US 1999-142064PP 19990702  
 GB 1999-18741 A 19990809  
 GB 1999-29553 A 19991214  
 WO 2000-GB2302 A 20000613  
 EP 2000-938916 20000613

GB 1999-13823 A 19990614  
 US 1999-142064PP 19990702  
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FAN 2001:923784

PATENT NO.

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			WO 2000-GB2302 A 20000613
			GB 2000-30304 A 20001213
			WO 2001-GB2553 W 20010612
FAN 2002:354079			
PATENT NO.	KIND	DATE	APPLICATION NO. DATE
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			GB 1997-18392 A 19970829
			GB 1998-3173 A 19980213
			WO 1998-GB2605 W 19980828
			GB 1999-13823 A 19990614
			US 1999-142064PP 19990702
			US 2000-485678 A220000225

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 GB 1998-3173 A 19980213  
 WO 2000077027 A2 20001221 WO 2000-GB2291 20000613  
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 GB 1999-13823 A 19990614  
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FAN 2002:465859

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002047762	A1	20020620	WO 2001-GB5526	20011212
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WO 2001044226	A1	20010621	WO 2000-GB4764	20001213
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			GB 1999-29552 A 19991214 WO 2000-GB2291 W 20000613	
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 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
 EP 2001-270360 20011212  
 WO 2000-GB4764 A 20001213  
 GB 2001-14185 A 20010612  
 WO 2001-GB5526 W 20011212

FAN 2002:964343  
 PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2002100847 A2 20021219 WO 2002-US16569 20020606  
 WO 2002100847 A3 20030821

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
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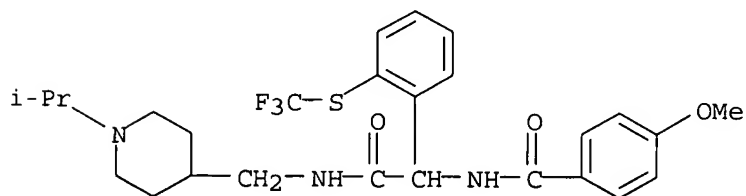
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WO 2000-GB2302 W 20000613  
 GB 2000-30304 A 20001213

OS MARPAT 136:37947  
 IT **380900-59-4P**  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of amino acid derivs. as serine protease inhibitors)

RN 380900-59-4 CAPLUS  
 CN Benzeneacetamide, .alpha.-[(4-methoxybenzoyl)amino]-N-[[1-(1-methylethyl)-4-piperidinyl]methyl]-2-[(trifluoromethyl)thio]- (9CI) (CA INDEX NAME)



AB Compds. R2-X-X-Y(Cy)-L-Lp(D)n [R2 is a 5- or 6-membered arom. carbon ring

optionally interrupted by a N, O or S ring atom, optionally substituted at the 3 and/or 4 position or forms a fused ring system at these positions, which is an optionally substituted 5- or 6-membered carbocyclic or heterocyclic ring, or substituted at the position alpha to X-X; X is a C, N, O or S atom or a CO, CR1a, C(R1a)2 or NR1a group, where R1a represents H, OH, alkoxy, alkyl, aminoalkyl, hydroxyalkyl, alkoxyalkyl, alkoxy carbonyl, alkylaminocarbonyl, alkoxy carbonylamino, acyloxymethoxycarbonyl or alkylamino optionally substituted by OH, alkylamino, alkoxy, oxo, aryl or cycloalkyl; Y is a N atom or a CR1b group (R1b defined as for R1a); Cy is an (un)substituted, (un)satd., mono- or polycyclic, homo- or heterocyclic group; L is an org. linker group contg. 1 to 5 backbone atoms selected from C, N, O and S, or a branched alkyl or cyclic group; -Lp(D)n is 1-[R10-(Lb)u-(G)t-(La)s]-3-pyrrolidinyl or -4-piperidinyl, where s, t and u = 0 or 1; La and Lb is a single bond, CO, O, NH or alkylimino; G = alkanediyl; R10 = alkyl, cycloalkyl, indanyl, pyridyl, tetrahydropyranyl, (un)substituted Ph, etc.] or their physiol.-tolerable salts were prepd. for use as serine protease and factor Xa inhibitors in the treatment of cardiovascular disorders. Compds. of the invention were found to significantly elongate the partial thromboplastin time (prothrombin time). Thus, 4-[(4-methoxybenzoyl-D-phenylglycyl)aminomethyl]-1-isopropylpiperidine was prepd. in the first of 106 examples.

RE.CNT 5        THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s serine protease and Thrombolic disorders  
L4            0 SERINE PROTEASE AND THROMBOLIC DISORDERS

=> s serine protease and factor xa  
L5            527 SERINE PROTEASE AND FACTOR XA

=> s l5 and Thrombotic disorders  
L6            7 L5 AND THROMBOTIC DISORDERS

=> d l6 fbib hitstr abs total

L6    ANSWER 1 OF 7    CAPLUS    COPYRIGHT 2003 ACS on STN  
AN    2003:634690    CAPLUS  
TI    SAR investigation on the in-vitro metabolism of 1,2-aminoethanol-derived non-covalent **factor Xa** inhibitors  
AU    Sheehan, Scott M.; Watson, Brian M.; Wiley, Michael R.; Liebeschuetz, J. W.; Sall, Daniel J.; Franciskovich, Jeffry B.; Marimuthu, Jothirajah; Smallwood, Jeffrey K.; Patel, Nita J.; Woodland, Joseph; Barbuch, Robert; Craft, Trelia J.; Gifford-Moore, Donetta; Farmen, Mark W.; Towner, Richard D.; Smith, Gerald F.  
CS    Lilly Research Laboratories, Eli Lilly and Company, Indianapolis, IN, 46285, USA  
SO    Abstracts of Papers, 226th ACS National Meeting, New York, NY, United States, September 7-11, 2003 (2003), MEDI-082 Publisher: American Chemical Society, Washington, D. C.  
      CODEN: 69EKY9  
DT    Conference; Meeting Abstract  
LA    English  
AB    The trypsin-like **serine protease factor Xa** (fXa) plays a key role in the coagulation cascade and is responsible for the conversion of prothrombin to thrombin. As a result, inhibition of fXa has emerged as a promising approach for the treatment of

**thrombotic disorders.** We have recently discovered a series of novel 1,2-aminoethanol-derived **factor Xa** inhibitors and we investigated the surrogate metabolic profile of these derivs. Metabolite identification studies have revealed sites of potential oxidative metab. In this presentation, the synthesis of these 1,2-aminoethanol-derived fXa inhibitors and their corresponding enzyme inhibitory activity will be disclosed. Discussion will focus on the impact of inhibitor structural modification on obsd. surrogate metab. in human, rat, dog, and monkey microsomes.

L6 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2000:709216 CAPLUS

DN 134:231346

TI An update on heparins at the beginning of the new millennium

AU Fareed, Jawed; Hoppensteadt, Debra A.; Bick, Rodger L.

CS Hemostasis & Thrombosis Research Laboratories, Department of Pathology and Pharmacology, Loyola University Medical Center, Maywood, IL, 60153, USA

SO Seminars in Thrombosis and Hemostasis (2000), 26(Suppl. 1), 5-21

CODEN: STHMBV; ISSN: 0094-6176

PB Thieme Medical Publishers, Inc.

DT Journal; General Review

LA English

AB A review with 35 refs. Unfractionated heparin has enjoyed the sole anticoagulant status for almost half a century. Besides an effective anticoagulant, this drug has been used in several addnl. indications. Despite the development of newer anticoagulant drugs, unfractionated heparin has remained the drug of choice for surgical anticoagulation and interventional cardiol. In the area of hematol. and transfusion medicine, unfractionated heparin has continued to play a major role as an anticoagulant drug. The development of low-mol.-wt. heparins (LMWHs) represents a refinement for the use of heparin. These drugs represent a class of depolymd. heparin derivs. with a distinct pharmacol. profile that is largely detd. by their compn. These drugs produce their major effects by combining with antithrombin and exerting antithrombin and anti-Xa inhibition. In addn., the LMWHs also increase non-antithrombin-dependent effects such as TFPI release, modulation of adhesion mols., and release of pro-fibrinolytic and antithrombotic mediators from the blood vessels. The cumulative effects of each of the different LMWHs differ and each product exhibits a distinct profile. Initially these agents were developed for the prophylaxis of postsurgical deep-vein thrombosis. However, at this time these drugs are used not only for prophylaxis, but also for the treatment of **thrombotic disorders** of both the venous and arterial type. To a large extent, the LMWHs have replaced unfractionated heparin in most s.c. indications. With the use of these refined heparins, outpatient anticoagulant management has gone through a dramatic evolution. For the first time, patients with **thrombotic disorders** can be treated in an outpatient setting. Thus, the introduction of LMWHs represents a major advance in improving the use of heparin. The development of the oral formulation of heparin and LMWHs also provides an important area that may impact on the use of heparin and LMWHs. The increased awareness of heparin-induced thrombocytopenia has necessitated the development of newer methods to identify patients at risk of developing this catastrophic syndrome. Furthermore, a strong interest has developed in alternate drugs or the management of patients with this syndrome. Despite the development of alternate anticoagulants that are mostly antithrombin derived (hirudins, hirulog), these agents have failed to provide similar clin. outcome as heparin in many indications. However, antithrombin drugs are useful in the anticoagulant management of

heparin-compromised patients. The FDA has approved a recombinant hirudin (Refludan) and a synthetic antithrombin agent, argatroban (Novastan), for this indication. The development of synthetic heparin pentasaccharide and anti-Xa agents may have an impact on the prophylaxis of **thrombotic disorders**. However, these monotherapeutic agents do not mimic the polytherapeutic actions of heparin. Furthermore, these agents do not inhibit thrombin. Heparin and LMWHs are capable of inhibiting not only **factor Xa** and thrombin, but other **serine proteases** in the coagulation network. The only way the newer drugs can mimic the actions of heparin is in combination modalities (polytherapeutic approaches). It has been suggested that newer antiplatelet drugs also exhibit anticoagulant actions. While these drugs may exhibit weak effects on thrombin generation, none of the currently available antiplatelet drugs exhibit any degree of antithrombin actions. It is likely that heparins synergize or augment the effects of the new antiplatelet drugs. Currently, combination approaches are used to anticoagulate patients in these studies. The dosage of heparins has been arbitrarily reduced. This may not be an optimal procedure. Addnl. clin. studies are needed to study these. Combinations where the alterations of these drugs are compared. Such combinations will require newer monitoring approaches. The development of oral thrombin agents, GP IIb/IIIa inhibitors, has met with some significant obstacles. Thus, it is unlikely that this approach will be very feasible in the indications where heparins are used. It is fair to state that heparins will continue to play a major role in the overall management of **thrombotic disorders** in monotherapeutic and polytherapeutic modalities.

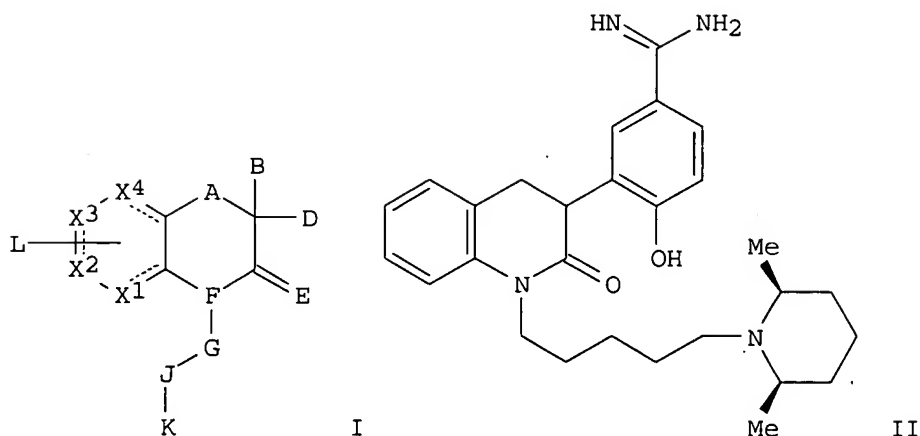
RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 1999:640853 CAPLUS  
DN 131:271815  
TI Preparation of 2(1H)-quinolinones as **serine protease**  
inhibitors for treatment of **thrombotic disorders**  
IN Dudley, Danette Andrea; Edmunds, Jeremy John  
PA Warner-Lambert Co., USA  
SO PCT Int. Appl., 136 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9950263	A1	19991007	WO 1998-US26709	19981215
W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HR, HU, ID, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2312953	AA	19991007	US 1998-80090P P	19980331
			CA 1998-2312953	19981215
			US 1998-80090P P	19980331
			WO 1998-US26709W	19981215
AU 9919184	A1	19991018	AU 1999-19184	19981215
AU 763110	B2	20030710		
			US 1998-80090P P	19980331

BR 9815786	A	20001121	WO 1998-US26709W 19981215
			BR 1998-15786 19981215
			US 1998-80090P P 19980331
EP 1091955	A1	20010418	WO 1998-US26709W 19981215
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			EP 1998-963966 19981215
			US 1998-80090P P 19980331
			WO 1998-US26709W 19981215
JP 2002509928	T2	20020402	JP 2000-541167 19981215
			US 1998-80090P P 19980331
			WO 1998-US26709W 19981215
NZ 505921	A	20030829	NZ 1998-505921 19981215
			US 1998-80090P P 19980331
			WO 1998-US26709W 19981215
ZA 9902448	A	20001011	ZA 1999-2448 19990330
			US 1998-80090P P 19980331
NO 2000004696	A	20000920	NO 2000-4696 20000920
			US 1998-80090P P 19980331
			WO 1998-US26709W 19981215

OS MARPAT 131:271815  
GI



AB 2(1H)-Quinolinones (I) [where A = CH<sub>2</sub>, CH, or C(alkyl); B and D = independently H, (un)substituted (cyclo)alkyl, hetero(cyclo)alkyl, aryl(alkyl), or heterocycle; E = absent or O, S, or NH; F = N, NCH<sub>2</sub>, or CH<sub>2</sub>N; G and (un)substituted K = independently absent or (cyclo)alkyl interrupted by 1 or more heteroatoms; J = absent or (un)substituted aryl or heterocycle; L = H, halogen, OH, (un)substituted alkoxy, alkyl, amino, etc.; X1-X4 = independently C or N], which display inhibitory effects on **serine proteases** such as **factor Xa**, thrombin and/or factor VIIa, were prepd. For example, 1,5-dibromopentane was added to 4-(benzyloxy)-3-(2-oxo-1,2,3,4-tetrahydro-3-quinolinyl)benzenecarbonitrile (5-step prepn. given) to yield the N-substituted tetrahydroquinolinone. Cis-2,6-dimethylpiperidine was added to the 5-bromopentylquinolinone to form the piperidinylpentyl deriv. This intermediate was converted to the title quinolinone II.2HCl by treatment



with NH<sub>2</sub>OH.HCl followed by addn. of CF<sub>3</sub>CO<sub>2</sub>H and redn. with Pd/C. Typically, the compds. of the invention showed 50% inhibition of **factor Xa** proteolytic activity on a synthetic substrate in concns. ranging from 50 .mu.M to 1 nM. II demonstrated inhibitory activity in std. assays of thrombin (IC<sub>50</sub> = 1.14 .mu.M), trypsin (IC<sub>50</sub> = 0.562 .mu.M), and **factor Xa** (IC<sub>50</sub> = 0.02 .mu.M). Compds. of the invention are claimed to be useful in the treatment or prevention of venous and arterial thrombosis, pulmonary embolism, myocardial and cerebral infarction, restenosis, cancer, angina, diabetes, heart failure, and atrial fibrillation in mammals.

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1999:640844 CAPLUS

DN 131:271886

TI Preparation of quinoxalinones as **serine protease** inhibitors for treatment of **thrombotic disorders**

IN Dudley, Danette Andrea; Edmunds, Jeremy John

PA Warner-Lambert Co., USA

SO PCT Int. Appl., 104 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9950254	A1	19991007	WO 1998-US26704	19981215
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			CA 1998-2319554	19981215
			US 1998-80042P P	19980331
AU 9919179	A1	19991018	WO 1998-US26704W	19981215
			AU 1999-19179	19981215
			US 1998-80042P P	19980331
BR 9815785	A	20001205	WO 1998-US26704W	19981215
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			US 1998-80042P P	19980331
EP 1068190	A1	20010117	WO 1998-US26704W	19981215
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			US 1998-80042P P	19980331
ZA 9902447	A	20001010	WO 1998-US26704W	19981215
			ZA 1999-2447	19990330
			US 1998-80042P P	19980331
US 6410536	B1	20020625	US 2000-601606	20000803
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NO 2000004697	A	20000920	NO 2000-4697	20000920
			US 1998-80042P P	19980331
			WO 1998-US26704W	19981215
US 2002086866	A1	20020704	US 2002-38006	20020104

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US 2000-601606 A320000803

OS MARPAT 131:271886  
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\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB 2(1H)-Quinoxalinones (I) [where A = N, N(alkyl)CH<sub>2</sub>, CH<sub>2</sub>N(alkyl), NO; B and D = independently H, (un)substituted (cyclo)alkyl, hetero(cyclo)alkyl, aryl(alkyl), or heterocycle; E = absent or O, S, or NH; F = N, NCH<sub>2</sub>, or CH<sub>2</sub>N; G and (un)substituted K = independently absent or (cyclo)alkyl interrupted by 1 or more heteroatoms; J = absent or (un)substituted aryl or heterocycle; L = H, halogen, OH, (un)substituted alkoxy, alkyl, amino, etc.; X1-X4 = independently C or N], which display inhibitory effects on **serine proteases** such as **factor Xa**, thrombin, trypsin, and/or factor VIIa, were prepd. For example, 1,5-dibromopentane was added to 4-(benzyloxy)-3-(3-oxo-3,4-dihydro-2-quinoxaliny)benzenecarbonitrile (6-step prepn. given) to yield the N-substituted dihydroquinoxaline. Cis-2,6-dimethylpiperidine was added to the 5-bromopentylquinoxalinone to form the piperidinylpentyl deriv. This intermediate was debenzylated and the nitrile converted to the carboximidamide to form the title quinoxalinone (II).2HCl. Typically, the compds. of the invention showed 50% inhibition of **factor Xa** proteolytic activity on a synthetic substrate in concns. ranging from 50 .mu.M to 1 nM. II demonstrated inhibitory activity in std. assays of thrombin (IC<sub>50</sub> = 2.96 .mu.M), trypsin (IC<sub>50</sub> = 2.03 .mu.M), and **factor Xa** (IC<sub>50</sub> = 0.065 .mu.M). At a concn. of 100 .mu.M, II inhibited the catalytic activity of human tissue factor/factor VIIa complex by 16%. In an in vitro assay, II demonstrated human prothrombinase (PTase) complex inhibition with an IC<sub>50</sub> of 0.0015 .mu.M. The effects of II on thrombosis and hemostasis was studied in a rabbit veno-venous shunt model and in a dog electrolytic injury model of thrombosis. At the highest dose, II prolonged a PTT and PT by a 5- and 3.9-fold, resp., for the veno-venous shunt model and by 1.4- and 1.75-fold, resp., for the electrolytic injury model. Compds. of the invention are claimed to be useful in the treatment or prevention of venous and arterial thrombosis, pulmonary embolism, myocardial and cerebral infarction, restenosis, cancer, angina, diabetes, heart failure, and atrial fibrillation in mammals.

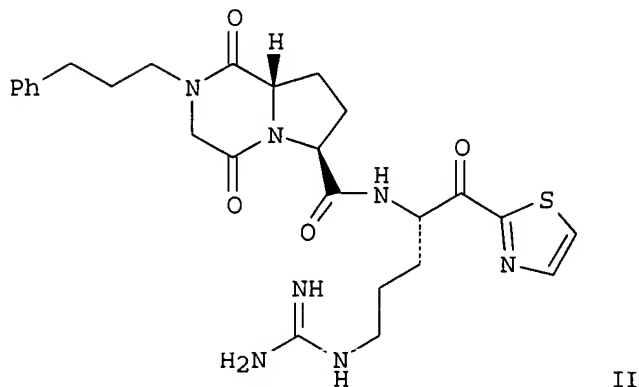
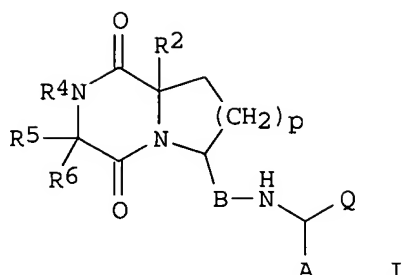
RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 1998:141160 CAPLUS  
TI Design, synthesis and biological activity of novel **factor Xa** inhibitors. 10. Optimization of dibenzyl cyclic urea analogs.  
AU Chou, Y.-L.; Guilford, W. J.; Koovakkat, S.; Mohan, R.; Wu, S. C.; Liang, A.; Trinh, L.; Morrissey, M. M.  
CS Berlex Biosciences, Richmond, CA, 94804, USA  
SO Book of Abstracts, 215th ACS National Meeting, Dallas, March 29-April 2 (1998), MEDI-130 Publisher: American Chemical Society, Washington, D. C. CODEN: 65QTAA  
DT Conference; Meeting Abstract  
LA English

AB Inhibitors of **factor Xa**, a **serine protease** involved in the coagulation cascade, are being developed both for the treatment and prevention of **thrombotic disorders**. Compds. 1 and 2 are novel **factor Xa** inhibitors that display selectivity over other **serine proteases** in the coagulation cascade. The synthesis and SAR of these compds. will be described.

L6 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 1998:31312 CAPLUS  
DN 128:102394  
TI Preparation of pyrrolo[1,2-a]pyrazine-1,4-dione **serine protease** inhibitors  
IN Berryman, Kent Alan; Doherty, Annette Marian; Edmunds, Jeremy John; Siddiqui, M. Arshad  
PA Warner-Lambert Co., USA; Berryman, Kent Alan; Doherty, Annette Marian; Edmunds, Jeremy John; Siddiqui, M. Arshad  
SO PCT Int. Appl., 71 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9748706	A1	19971224	WO 1997-US9832	19970610
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	RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
				US 1996-19989P P	19960618
	AU 9732325	A1	19980107	AU 1997-32325	19970610
				US 1996-19989P P	19960618
				WO 1997-US9832 W	19970610
	US 6124291	A	20000926	US 1998-171863	19981027
				US 1996-19989P P	19960618
				WO 1997-US9832 W	19970610
OS	MARPAT 128:102394				
GI					



AB This invention relates to pyrrolo[1,2-a]pyrazine-1,4-diones I (B = CO, CH<sub>2</sub>; R<sub>2</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub> = independently H, alkyl, substituted alkyl; A = basic group; Q = H, keto heterocycle group; p = 0-2). The compds. are inhibitors of **serine proteases**, typically thrombin, **Factor Xa**, and Factor VIIa, and are useful for treating and preventing **thrombotic disorders**. Thus, title deriv. II was prepd. in 14 steps from Z-Asp-OCMe<sub>3</sub> (Z = PhCH<sub>2</sub>O<sub>2</sub>C), Ph(CH<sub>2</sub>)<sub>3</sub>-Gly-OCH<sub>2</sub>Ph, Boc-Arg(Mtr)-OH (Boc = Me<sub>3</sub>CO<sub>2</sub>C; Mtr = 4-methoxy-2,3,6-trimethylphenylsulfonyl), and thiazole. II inhibited thrombin with K<sub>i</sub> = 3 nM, **factor Xa** at 30 nM, and trypsin <1 nM.

L6 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1995:76729 CAPLUS

DN 122:229811

TI **Factor Xa** inhibitors

AU Mao, Shi-Shan

CS Merck Research Laboratories, Department Biological Chemistry, West Point, PA, 19486, USA

SO Perspectives in Drug Discovery and Design (1994), 1(3), 423-30

CODEN: PDDDEC; ISSN: 0928-2866

DT Journal; General Review

LA English

AB A review with 50 refs. **Factor Xa** is the **serine protease** that activates prothrombin to yield thrombin. Inhibitors of **factor Xa** play a crucial role in curtailing thrombin generation. Two key **factor Xa** inhibitors that are found in blood are antithrombin III and tissue factor pathway inhibitor. Inhibition of **factor Xa** is a mechanism that is also exploited by certain hematophagous animals to

facilitate feeding. Evaluation of tick anticoagulant peptide (TAP) and leech-derived antistasin (ATS) using animal models of **thrombotic disorders** has confirmed that specific blockade of **factor Xa** activity is an effective antithrombotic strategy. Several labs. are currently pursuing low-mol. wt. synthetic **factor Xa** inhibitors for use as anticoagulants in the treatment and/or prevention of thrombosis.

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L7 1 L5 AND L3

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(FILE 'HOME' ENTERED AT 14:13:27 ON 06 OCT 2003)

FILE 'REGISTRY' ENTERED AT 14:13:36 ON 06 OCT 2003

L1 STRUCTURE UPLOADED

L2 1 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 14:14:09 ON 06 OCT 2003

L3 1 S L2

L4 0 S SERINE PROTEASE AND THROMBOLIC DISORDERS

L5 527 S SERINE PROTEASE AND FACTOR XA

L6 7 S L5 AND THROMBOTIC DISORDERS

L7 1 S L5 AND L3

=> d l7 fbib hitstr abs total

L7 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:923765 CAPLUS

DN 136:37947

TI Preparation of amino acid derivatives as **serine protease** inhibitors

IN Liebeschuetz, John Walter; Murray, Christopher William; Young, Stephen Clinton; Camp, Nicholas Paul; Jones, Stuart Donald; Wylie, William Alexander; Masters, John Joseph; Wiley, Michael Robert; Sheehan, Scott Martin; Engel, David Birenbaum; Watson, Brian Morgan

PA Eli Lilly and Company, USA

SO PCT Int. Appl., 188 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 13

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001096303	A1	20011220	WO 2001-GB2551	20010612
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
				WO 2000-GB2302 W	20000613
				GB 2000-30305 A	20001213

WO 2000076971 A2 20001221 WO 2000-GB2302 20000613  
 WO 2000076971 A3 20010802  
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 GB 1999-13823 A 19990614  
 US 1999-142064PP 19990702  
 GB 1999-18741 A 19990809  
 GB 1999-29553 A 19991214  
 EP 1289954 A1 20030312 EP 2001-940716 20010612  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
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 WO 2000-GB2302 A 20000613  
 GB 2000-30305 A 20001213  
 WO 2001-GB2551 W 20010612  
 US 2002-30188 20020204  
 WO 2000-GB2302 A 20000613  
 GB 2000-30305 A 20001213  
 WO 2001-GB2551 W 20010612  
 US 2003109706 A1 20030612

## PATENT FAMILY INFORMATION:

FAN 1999:184268

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9911657	A1	19990311	WO 1998-GB2600	19980828
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			GB 1997-18392	A 19970829
			GB 1998-3173	A 19980213
AU 9888753	A1	19990322	AU 1998-88753	19980828
			GB 1997-18392	A 19970829
			GB 1998-3173	A 19980213
			WO 1998-GB2600	W 19980828
EP 1012166	A1	20000628	EP 1998-940425	19980828
R: CH, DE, ES, FR, GB, IT, LI, NL				
			GB 1997-18392	A 19970829
			GB 1998-3173	A 19980213
			WO 1998-GB2600	W 19980828
US 6262069	B1	20010717	US 2000-485677	20000225
			GB 1997-18392	A 19970829
			GB 1998-3173	A 19980213
			WO 1998-GB2600	W 19980828
US 2002040144	A1	20020404	US 2001-865418	20010529
			GB 1997-18392	A 19970829
			GB 1998-3173	A 19980213
			WO 1998-GB2600	W 19980828
			US 2000-485677	A120000225

US 6420438	B1	20020716	US 2000-865418	20010529
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FAN 1999:184269				
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PI WO 9911658	A1	19990311	WO 1998-GB2605	19980828
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			GB 1998-3173 A	19980213
AU 9888757	A1	19990322	AU 1998-88757	19980828
			GB 1997-18392 A	19970829
			GB 1998-3173 A	19980213
EP 1009758	A1	20000621	WO 1998-GB2605 W	19980828
R: DE, FR, GB, IT			EP 1998-940430	19980828
			GB 1997-18392 A	19970829
			GB 1998-3173 A	19980213
US 2002055522	A1	20020509	WO 1998-GB2605 W	19980828
			US 2001-988082	20011119
			GB 1997-18392 A	19970829
			GB 1998-3173 A	19980213
			WO 1998-GB2605 W	19980828
			GB 1999-13823 A	19990614
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			US 2000-485678 A2	20000225
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FAN 2000:900613				
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PI WO 2000076970	A2	20001221	WO 2000-GB2296	20000613
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EP 1192135	A2	20020403	EP 2000-938912	20000613
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			US 1999-142064PP 19990702
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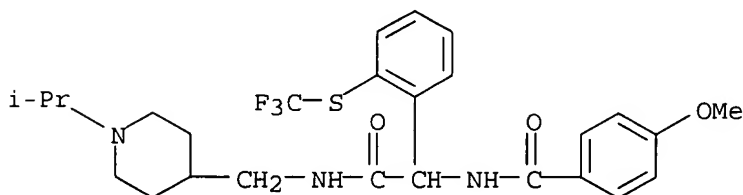
IT **380900-59-4P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of amino acid derivs. as **serine protease inhibitors**)

RN 380900-59-4 CAPLUS

CN Benzeneacetamide, .alpha.-[(4-methoxybenzoyl)amino]-N-[[1-(1-methylethyl)-4-piperidinyl)methyl]-2-[(trifluoromethyl)thio]- (9CI) (CA INDEX NAME)



AB Compds. R2-X-X-Y(Cy)-L-Lp(D)n [R2 is a 5- or 6-membered arom. carbon ring optionally interrupted by a N, O or S ring atom, optionally substituted at the 3 and/or 4 position or forms a fused ring system at these positions, which is an optionally substituted 5- or 6-membered carbocyclic or heterocyclic ring, or substituted at the position alpha to X-X; X is a C, N, O or S atom or a CO, CR1a, C(R1a)2 or NR1a group, where R1a represents H, OH, alkoxy, alkyl, aminoalkyl, hydroxyalkyl, alkoxyalkyl, alkoxyacarbonyl, alkylaminocarbonyl, alkoxyacarbonylamino, acyloxymethoxycarbonyl or alkylamino optionally substituted by OH, alkylamino, alkoxy, oxo, aryl or cycloalkyl; Y is a N atom or a CR1b group (R1b defined as for R1a); Cy is an (un)substituted, (un)satd., mono- or polycyclic, homo- or heterocyclic group; L is an org. linker group contg. 1 to 5 backbone atoms selected from C, N, O and S, or a branched alkyl or cyclic group; -Lp(D)n is 1-[R10-(Lb)u-(G)t-(La)s]-3-pyrrolidinyl or -4-piperidinyl, where s, t and u = 0 or 1; La and Lb is a single bond, CO, O, NH or alkylimino; G = alkanediyl; R10 = alkyl, cycloalkyl, indanyl, pyridyl, tetrahydropyranyl, (un)substituted Ph, etc.] or their physiol.-tolerable salts were prepd. for use as **serine protease** and **factor Xa** inhibitors in the treatment of cardiovascular disorders. Compds. of the invention were found to significantly elongate the partial thromboplastin time (prothrombin time). Thus, 4-[(4-methoxybenzoyl-D-phenylglycyl)aminomethyl]-1-isopropylpiperidine was prepd. in the first of 106 examples.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
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FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION

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